## USFS EMIGRATION CAMPGROUND (PWS 6040031) SOURCE WATER ASSESSMENT FINAL REPORT

February 21, 2003



## State of Idaho Department of Environmental Quality

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## **Executive Summary**

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This assessment is based on a land use inventory of the designated assessment areas and sensitivity factors associated with the well and the aquifer characteristics.

This report, Source Water Assessment for USFS Emigration Campground: Public Water System (PWS) #6040031 describes the PWS, the associated potential contaminant sources located within a 1,000-foot boundary around the drinking water source, and the susceptibility (risk) that may be associated with any associated potential contaminants. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this system. The results should not be used as an absolute measure of risk and is not intended to undermine the confidence in your water system.

The USFS Emigration Campground (PWS # 6040031) is a transient drinking water system. The campground is located in Bear Lake County approximately ten miles northwest of Ovid, Idaho, off Highway 36. The well source for the campground is located in Franklin County and supplies drinking water to approximately 30 persons through 10 connections.

There are two potential contaminant sources within the delineation capture zone of the well: Highway 36 and the campground road. If an accidental spill occurred into these corridors, inorganic chemical (IOC) contaminants, volatile organic chemical (VOC) contaminants, synthetic organic chemical (SOC) contaminants, or microbial contaminants could be added to the aquifer system. Additionally, these roadways can potentially add leachable contaminants to the water system, contributing to the overall vulnerability of the drinking water system.

Final well susceptibility scores are derived from equally weighting potential contaminant inventory/land use, hydrologic sensitivity, and system construction scores. Therefore, a low rating in one category coupled with a higher rating in the another category results in a final rating of low, moderate, or high susceptibility. Potential contaminants are divided into four categories: IOCs (e.g., nitrates, arsenic), VOCs (e.g., petroleum products), SOCs (e.g., pesticides), and microbial contaminants (e.g., bacteria). As a well can be subject to various contamination settings, separate scores are given for each type of contaminant.

For the assessment, a review of laboratory tests was conducted using the State Drinking Water Information System (SDWIS). The IOC nitrate has been detected in the water samples but at concentrations below the maximum contaminant level (MCL), as established by the EPA. No coliform bacteria have been detected in the well water thus far. Since the campground is a transient drinking water system, the water was not tested for VOCs or SOCs.

In terms of total susceptibility, the well rated moderate for IOCs, VOCs, SOCs, and microbial contaminants. System construction rated moderately susceptible and hydrologic sensitivity rated highly susceptible to contamination for the well. Potential Contaminant/Land Use scores were low for IOCs, VOCs, SOCs, and microbial contaminants. The well log for this system was unavailable, contributing to the more conservative susceptibility score. The roadways within the delineation also contributed to the overall susceptibility of the well.

This assessment should be used as a basis for determining appropriate new protection measures or reevaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources. If the system should need to expand in the future, new well or spring sites should be located in areas with as few potential sources of contamination as possible, and the site should be reserved and protected for this specific use.

For the USFS Emigration Campground, drinking water protection activities should first focus on correcting any deficiencies outlined in the sanitary survey (an inspection conducted every five years with the purpose of determining the physical condition of a water system's components and its capacity). As land uses within most of the source water assessment areas are outside the direct jurisdiction of the USFS Emigration Campground, collaboration and partnerships with state and local agencies and industry groups should be established and are critical to success. Educating the employees and the public about source water will further assist the system in its monitoring and protection efforts.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan. Public education topics could include household hazardous waste disposal methods and the importance of water conservation. There are multiple resources available to help water systems implement protection programs, including the Drinking Water Academy of the EPA. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Bear Lake County Soil and Water Conservation District, and the Natural Resources Conservation Service. For assistance in developing protection strategies please contact the Pocatello Regional Office of the Idaho Department of Environmental Quality.

# SOURCE WATER ASSESSMENT FOR <u>USFS EMIGRATION CAMPGROUND</u>, OVID, IDAHO

#### Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. It is important to review this information to understand what the ranking of this assessment means. Maps showing the delineated source water assessment area and the inventory of significant potential sources of contamination identified within that area are included. The list of significant potential contaminant source categories and their rankings used to develop the assessment also is included.

#### Level of Accuracy and Purpose of the Assessment

The Idaho Department of Environmental Quality (DEQ) is required by the U.S. Environmental Protection Agency (EPA) to assess over 2,900 public drinking water sources in Idaho for their relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area, sensitivity factors associated with the well, and aquifer characteristics. All assessments must be completed by May of 2003. The resources and time available to accomplish assessments are limited. Therefore, an in-depth, site-specific investigation to identify each significant potential source of contamination for every public water supply system is not possible. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should <u>not be</u> used as an absolute measure of risk and they should <u>not be</u> used to undermine public confidence in the public water system (PWS).

The ultimate goal of the assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. DEQ recognizes that pollution prevention activities generally require less time and money to implement than treatment of a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a drinking water protection program should be determined by the local community based on its own needs and limitations. Wellhead or drinking water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

### **Section 2. Conducting the Assessment**

#### **General Description of the Source Water Quality**

The USFS Emigration Campground (PWS # 6040031) is a transient drinking water system. The campground is located in Bear Lake County approximately ten miles northwest of Ovid, Idaho, off Highway 36 (see Figure 1). The well source for the campground is located in Franklin County and supplies drinking water to approximately 30 persons through 10 connections.

FIGURE 1. Geographic Location of USFS Emigration Campground STATE OF IDAHO COEUR D'ALENE 100 Miles LEMETON DANG FALLS BOISE CATELLO BEAR LANE COUNTY mpground Pole WELL 2444 SHARON DT Canyon Copenhagen Canyon

2 Miles

The inorganic chemical (IOC) nitrate has been detected in the water samples but at concentrations below the maximum contaminant level (MCL), as established by the EPA. No coliform bacteria have been detected in the well water thus far. Since the campground is a transient drinking water system, the water has not been tested for volatile organic chemicals (VOCs) or synthetic organic chemicals (SOCs).

#### **Defining the Zones of Contribution – Delineation**

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The arbitrary-fixed radius method was used to delineate transient water systems (Idaho Source Water Assessment Plan, pg. 15 and E5-E6).

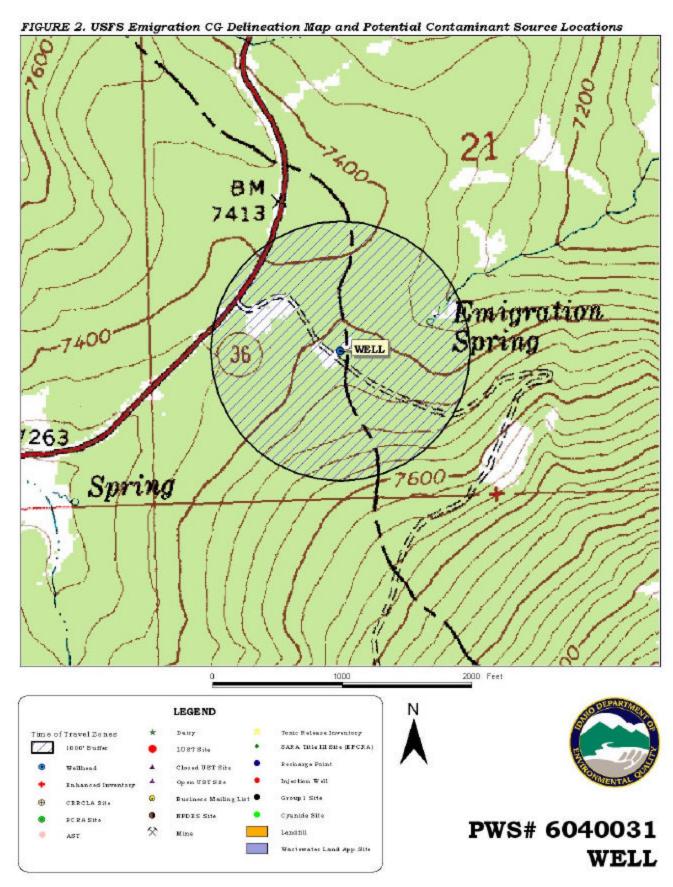
The delineation of a source water assessment area using the arbitrary fixed radius method involves drawing a circle around a drinking water source using a fixed distance that is identical for every drinking water source. The distance is typically set by statute and is often based on economic and political justification, as opposed to technical merit. This method is easy to implement, inexpensive, and the data requirements are minimal. The major disadvantage is the degree of uncertainty due to the lack of scientific basis for the selection of the distance. An additional disadvantage is that the application of a single standard to a wide range of PWSs with different characteristics can lead to delineations that inaccurately represent the source water assessment area.

A Minnesota study showed that one-year time-of-travel (TOT) capture zones of transient non-community wells completed in unconfined porous sediments are unlikely to exceed 115 feet in the up-gradient direction (IDEQ, 1999). EPA recommends a one-year travel time to protect wellheads from bacteria and viruses. To be conservative, IDEQ applied a delineation of a 1,000-foot radius circle around each transient system's source. It is impractical to develop more intensive delineations for these systems because of limited resources for protection, and lack of jurisdiction over land use outside property boundaries.

#### **Identifying Potential Sources of Contamination**

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act. Furthermore, these sources have a sufficient likelihood of releasing such contaminants into the environment at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. Field surveys conducted by DEQ and reviews of available databases identified potential contaminant sources within the delineated area.

It is important to understand that a release may never occur from a potential source of contamination provided they are using best management practices. Many potential sources of contamination are regulated at the federal level, state level, or both, to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the <u>potential</u> for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, including educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply source.



### **Contaminant Source Inventory Process**

A contaminant inventory of the study area was conducted in December 2002. This involved identifying and documenting potential contaminant sources within the USFS Emigration Campground source water assessment area through the use of field surveys, computer databases and Geographic Information System (GIS) maps developed by DEQ.

An inventory of potential contaminant sources is included in Table 1 below. Sources include Highway 36 and the campground driveway. These sources could potentially contribute IOCs, VOCs, SOCs, and microbials, as well as leachable contaminants to the aquifer. A map with the well location, delineated area, and potential contaminant sources is provided with this report (see Figure 2).

Table 1. USFS Emigration Campground, Well, Potential Contaminant Inventory

Source Description	Source of Information	Potential Contaminants <sup>1</sup>				
Highway 36	GIS Map	IOC, VOC, SOC, Microbial				
Campground Driveway	GIS Map	IOC, VOC, SOC, Microbial				

<sup>&</sup>lt;sup>1</sup> IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

## Section 3. Susceptibility Analysis

The susceptibility of the well to contamination was ranked as high, moderate, or low risk according to the following considerations: hydrologic sensitivity, system construction, land use characteristics, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for the well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. Attachment A contains the susceptibility analysis worksheet. The following summaries describe the rationale for the susceptibility ranking.

## **Hydrologic Sensitivity**

The hydrologic sensitivity of a well is dependent upon four factors. These factors are surface soil composition, the material in the vadose zone (between the land surface and the water table), the depth to first ground water, and the presence of a 50-foot thick fine-grained zone (aquitard) above the producing zone of the well. Slowly draining soils such as silt and clay have better filtration capabilities and therefore are typically more protective of ground water than coarse-grained soils such as sand and gravel. Similarly, fine-grained sediments in the subsurface and a water depth of more than 300 feet protect the ground water from contamination.

Hydrologic sensitivity rated high for the well. This is based upon moderate-to-well-drained soil classes as defined by the National Resource Conservation Service (NRCS), being located within the delineated area. Soils that have poor to moderate drainage characteristics have better filtration capabilities than faster draining soils.

The well log was unavailable, limiting the information concerning the composition of the vadose zone, the depth to first ground water, and the presence of any low permeability units above the producing zone of the well. When information is unavailable, a higher, more conservative score is given.

#### **Well Construction**

Well construction directly affects the ability of the well to protect the aquifer from contaminants. System construction scores are reduced when information shows that potential contaminants will have a more difficult time reaching the intake of the well. Lower scores imply a system is less vulnerable to contamination. For example, if the well casing and annular seal both extend into a low permeability unit, then the possibility of contamination is reduced and the system construction score goes down. If the highest production interval is more than 100 feet below the water table, then the system is considered to have better buffering capacity. If the wellhead and surface seal are maintained to standards, as outlined in sanitary surveys, then contamination down the well bore is less likely. If the well is protected from surface flooding and is outside the 100-year floodplain, then contamination from surface events is reduced.

The well log for the USFS Emigration Campground well was unavailable. However, the 2002 sanitary survey (conducted by the USFS) did provide some well construction information. The well was drilled in 1996 to a depth of 240 feet below ground surface (bgs) and a 1.5 horsepower (hp) submersible pump was installed at a depth of 220 feet bgs. At that time, the static water level was found at 175 feet bgs. However, since 1996, the static water level has dropped to 218 feet bgs.

The system construction score was moderate for the well. There was insufficient well log information to determine the well casing thickness, depth of the casing and annular seal, and whether the casing and annular seal both extend to low permeability units. However, the 2002 sanitary survey indicated that the wellhead and surface seal are maintained to standards and that the well is properly protected from surface flooding. The well is located outside a 100-year floodplain. The highest production zone of the well is not 100 feet below the static water level.

The Idaho Department of Water Resources (IDWR) *Well Construction Standards Rules (1993)* require all PWSs to follow DEQ standards. IDAPA 58.01.08.550 requires that PWSs follow the *Recommended Standards for Water Works (1997)* during construction. Under current standards, all PWS wells are required to have a 50-foot buffer around the wellhead and if the well is designed to yield greater than 50 gpm a minimum of a 6-hour pump test is required. These standards are used to rate the system construction for the well by evaluating items such as condition of wellhead and surface seal, whether the casing and annular space is within consolidated material or 18 feet below the surface, the thickness of the casing, etc. If all criteria are not met, the public water source does not meet the IDWR Well Construction Standards. In this case, there was insufficient information available to determine if the well meets all the criteria outlined in the IDWR Well Construction Standards.

#### **Potential Contaminant Source and Land Use**

The well rated low for IOCs (e.g., nitrates, arsenic), VOCs (e.g., petroleum products), SOCs (e.g., pesticides), and microbial contaminants (e.g., bacteria). The absence of irrigated agricultural land and the low number of potential contaminant sources within the delineation contributed to the low land use scores.

#### **Final Susceptibility Ranking**

A detection above a drinking water standard MCL, any detection of a VOC or SOC, or a confirmed microbial detection at the well will automatically give a high susceptibility rating to the well, despite the land use of the area, because a pathway for contamination already exists. Additionally, potential contaminant sources within 100 feet of a well will automatically lead to a high susceptibility rating. Having multiple potential contaminant sources in the 0-3-year time of travel zone (Zone 1B) contributed greatly to the overall ranking.

Table 2. Summary of USFS Emigration Campground Susceptibility Evaluation

Drinking	Susceptibility Scores <sup>1</sup>										
Water Sources Hydrologic Sensitivity			Potential Contaminant Inventory and Land Use			System Construction	Final Susceptibility Ranking				
		IOC	VOC	SOC	Microbials		IOC	VOC	SOC	Microbials	
Well	Н	L	L	L	L	M	M	M	M	M	

<sup>&</sup>lt;sup>1</sup>H = High Susceptibility, M = Moderate Susceptibility, L = Low Susceptibility,

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

#### **Susceptibility Summary**

In terms of total susceptibility, the well rated moderate for IOCs, VOCs, SOCs, and microbial contaminants. System construction rated moderate and hydrologic sensitivity rated high for the well. Potential Contaminant/Land Use scores were low for IOCs, VOCs, SOCs, and microbial contaminants. The well log for this system was unavailable, contributing to the susceptibility. The roadways also contributed to the overall susceptibility of the well.

The IOC nitrate has been detected in the water samples but at concentrations below the maximum contaminant level (MCL), as established by the EPA. No coliform bacteria have been detected in the well water thus far. Since the campground is a transient drinking water system, the water was not tested for VOCs or SOCs.

## **Section 4. Options for Drinking Water Protection**

This assessment should be used as a basis for determining appropriate new protection measures or reevaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources. If the system should need to expand in the future, new well or spring sites should be located in areas with as few potential sources of contamination as possible, and the site should be reserved and protected for this specific use.

An effective drinking water protection program is tailored to the particular local drinking water protection area. A community with a fully developed drinking water protection program will incorporate many strategies. For the USFS Emigration Campground, drinking water protection activities should first focus on correcting any deficiencies outlined in the sanitary survey. As land uses within most of the source water assessment areas are outside the direct jurisdiction of the USFS Emigration Campground, collaboration and partnerships with state and local agencies and industry groups should be established and are critical to success. Educating the employees and the public about source water will further assist the system in its monitoring and protection efforts.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan. Public education topics could include household hazardous waste disposal methods and the importance of water conservation. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the EPA. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Bear Lake County Soil and Water Conservation District, and the Natural Resources Conservation Service. For assistance in developing protection strategies please contact the Pocatello Regional Office of the DEQ.

#### **Assistance**

Public water supplies and others may call the following DEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the DEQ office for preliminary review and comments.

Pocatello Regional DEQ Office (208) 236-6160

State DEQ Office (208) 373-0502

Website: <a href="http://www.deq.state.id.us">http://www.deq.state.id.us</a>

## POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

<u>AST (Aboveground Storage Tanks)</u> – Sites with aboveground storage tanks.

<u>Business Mailing List</u> – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

<u>CERCLA</u> – This includes sites considered for listing under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). CERCLA, more commonly known as Superfund is designed to clean up hazardous waste sites that are on the national priority list (NPL).

<u>Cyanide Site</u> – DEQ permitted and known historical sites/facilities using cyanide.

<u>Dairy</u> – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

<u>Deep Injection Well</u> – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

**Floodplain** – This is a coverage of the 100-year floodplains.

<u>Group 1 Sites</u> – These are sites that show elevated levels of contaminants and are not within the priority one areas.

<u>Inorganic Priority Area</u> – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

<u>Landfill</u> – Areas of open and closed municipal and nonmunicipal landfills.

<u>LUST (Leaking Underground Storage Tank)</u> – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

<u>Mines and Quarries</u> – Mines and quarries permitted through the Idaho Department of Lands.)

<u>Nitrate Priority Area</u> – Area where greater than 25% of wells/springs show nitrate values above 5 mg/L.

#### NPDES (National Pollutant Discharge Elimination

**System)** – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

<u>Organic Priority Areas</u> – These are any areas where greater than 25% of wells/springs show levels greater than 1% of the primary standard or other health standards.

**Recharge Point** – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RCRA – Site regulated under Resource Conservation
Recovery Act (RCRA). RCRA is commonly associated with
the cradle to grave management approach for generation,
storage, and disposal of hazardous wastes.

#### **SARA Tier II (Superfund Amendments and**

**Reauthorization Act Tier II Facilities**) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

<u>UST (Underground Storage Tank)</u> – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

<u>Wastewater Land Applications Sites</u> – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

<u>Wellheads</u> – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

**NOTE:** Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

#### **References Cited**

- Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environment Managers, 1997. "Recommended Standards for Water Works."
- Idaho Department of Environmental Quality. 2000. Design Standards for Public Drinking Water Systems. IDAPA 58.01.08.550.01.
- Idaho Division of Environmental Quality, 1997, Idaho Wellhead Protection Plan, Idaho Wellhead Protection Work Group, February.
- Idaho Division of Environmental Quality Ground water Program, October 1999. Idaho Source Water Assessment Plan.
- Idaho Division of Environmental Quality Ground water Program, October 1999. Idaho Source Water Assessment Plan.
- MDH (Minnesota Department of Health) 1998. Assessing the susceptibility of transient noncommunity water supply wells to pathogens, MDH 7-31-98, 28 pages.
- Safe Drinking Water Information System (SDWIS). Idaho Department of Environmental Quality.

United States Forest Service (USFS). Sanitary Survey for USFS Emigration Campground: PWS #6040031.

## Attachment A

# USFS Emigration Campground Susceptibility Analysis Worksheet

#### **Susceptibility Analysis Formulas**

#### Formula for Well Sources

The final well scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use X 0.27)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use X 0.375)

#### Final Susceptibility Scoring:

- 0 5 Low Susceptibility
- 6 12 Moderate Susceptibility
- ≥ 13 High Susceptibility

. System Construction		SCORE			
Drill Date					
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	YES	2002			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
	Total System Construction Score	4			
Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
	Total Hydrologic Score	6			
		IOC	VOC	SOC	Microbia
Potential Contaminant / Land Use - ZONE 1A		Score	Score	Score	Score
Land Use Zone 1A	RANGELAND, WOODLAND, BASALT	0	0	0	0
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential	Contaminant Source/Land Use Score - Zone 1A	0	0	0	0
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	2	2	2	2
(Score = # Sources X 2 ) 8 Points Maximum		4	4	4	4
Sources of Class II or III leacheable contaminants or	YES	2	2	2	
4 Points Maximum		2	2	2	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Co	ontaminant Source / Land Use Score - Zone 1B	6	6 	6	4
		6	6	6	4
Cumulative Potential Contaminant / Land Use Score					
Cumulative Potential Contaminant / Land Use Score  Final Susceptibility Source Score		12	12	12	12